## Abstract of the Disclosure

A wastewater treatment process wherein a portion of a mixture of influent waste water and biomass are transferred from a first anaerobic region to a second anaerobic region having a relatively long retention time in order to produce additional very short chain fatty acids therein which are thereafter returned to the first anaerobic region so that biomass therein takes up the very short chain fatty acids. The contents of the first anaerobic region thereafter flow downstream into an aerobic region wherein the biomass takes up phosphorus. A portion of the biomass is returned to the first anaerobic region and a second portion of the biomass is wasted with phosphorus therein, thereby removing phosphorus from the wastewater being treated.